

**REMARKS**

In view of the above amendments and the following remarks, reconsideration of the outstanding office action is respectfully requested.

Claims 18 and 19 have been canceled and claims 1 and 22 have been amended. New claims 43, 44, 45, 46, 47, 48, and 49 have been added, and these claims find descriptive support in original claims 2, 14, 17, 28, 29, 38, and 41, respectively. Claim 1 has been amended to incorporate the limitations of original claim 19. Claim 22 has been amended to place it in independent form. No new matter has been added by way of these amendments. Claims 1-17, 21-23, and 28-49 are currently pending.

The rejection of claims 1-4, 9-18, 21, 28, 29, 37, and 41 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,060,288 to Adams et al. ("Adams") is respectfully traversed in view of the above amendments to claim 1. Adams teaches a method of amplifying and detecting target nucleic acids using primers attached to a solid support. As noted above, claim 1 has been amended to incorporate the limitations of original claim 19. In particular, claim 1 now recites the chemical structure of the 5'-Amino Modifier C6 spacer originally recited in claim 19. Because claim 19 is not covered by this rejection, applicants respectfully submit that this rejection is improper and should be withdrawn.

The rejection of claim 5 under 35 U.S.C. § 103(a) for obviousness over Adams in view of U.S. Patent No. 5,475,098 to Hall ("Hall") is respectfully traversed in view of the above amendments to claim 1 and the following remarks. Hall is cited as teaching that *Escherichia coli* nucleic acids could be detected from biological samples using polymerase chain reaction ("PCR") and probes specific to the *E. coli* nucleic acids. Claim 5 indirectly depends from amended claim 1. Nowhere does Hall teach or suggest the 5'-Amino Modifier C6 spacer recited in amended claim 1. Because Adams is deficient for the reasons noted above, and Hall fails to overcome the deficiencies of Adams, the presently claimed invention would not have been obvious over Adams in view of Hall. Therefore, the rejection of claim 5 should be withdrawn.

The rejection of claim 6 under 35 U.S.C. § 103(a) for obviousness over Adams in view of U.S. Patent No. 5,489,513 to Springer ("Springer") is respectfully traversed in view of the above amendments to claim 1 and the following remarks. Springer is cited as teaching that *Candida albicans* nucleic acids could be detected from biological samples using PCR and probes specific to the *C. albicans* nucleic acids. Claim 6 indirectly depends from claim 1. Nowhere does Springer teach or suggest the 5'-Amino Modifier C6 spacer recited in amended claim 1. Because Adams is deficient for the reasons noted above, and Springer fails to overcome the deficiencies of Adams, the presently claimed invention would not have been

obvious over Adams in view of Springer. Therefore, the rejection of claim 6 should be withdrawn.

The rejection of claim 7 under 35 U.S.C. § 103(a) for obviousness over Adams in view of U.S. Patent No. 5,599,662 to Respass ("Respass") is respectfully traversed in view of the above amendment to claim number one and the following remarks. Respass is cited as teaching the detection of HIV nucleic acids in biological samples using PCR and probes specific for the amplified HIV nucleic acids. Claim 7 indirectly depends from claim 1. Nowhere does Respass teach or suggest the 5'-Amino Modifier C6 spacer recited in amended claim 1. Because Adams is deficient for the reasons noted above, and Respass fails to overcome the deficiencies of Adams, the presently claimed invention would not have been obvious over Adams in view of Respass. Therefore, the rejection of claim 7 should be withdrawn.

The rejection of claim 8 under 35 U.S.C. § 103(a) for obviousness over Adams in view of U.S. Patent No. 5,792,609 to Wataya ("Wataya") is respectfully traversed in view of the above amendments to claimed 1 and the following remarks. Wataya is cited as teaching that *Plasmodium falciparum* nucleic acids could be detected from biological samples using PCR and probes specific to the amplified *P. falciparum* nucleic acids. Claim 8 indirectly depends from claim 1. Nowhere does Wataya teach or suggest the 5'-Amino Modifier C6 spacer recited in amended claim 1. Because Adams is deficient for the reasons noted above, and Wataya fails to overcome the deficiencies of Adams, the presently claimed invention would not have been obvious over Adams in view of Wataya. Therefore, the rejection of claim 8 should be withdrawn.

The rejection of claims 19 and 22-23 under 35 U.S.C. § 103(a) for obviousness over Adams in view of U.S. Patent No. 6,582,918 to Janjic et al. ("Janjic") is respectfully traversed in view of the following remarks. Janjic is cited as teaching the chemical structures of a pentyl amino linker (i.e., a 5'-amino modifier C6 spacer) (Figure 9D) and a hexaethylene glycol spacer phosphoramidite (Figure 9C). Janjic teaches that the pentyl amino linker and the hexaethylene glycol spacer phosphoramidite can be used to link together a platelet-derived growth factor ("PDGF") nucleic acid ligand and a non-immunogenic, high molecular weight compound to form a therapeutic complex. The therapeutic complex can be administered to patients having a PDGF-mediated disease. However, neither Adams nor Janjic teaches or suggests using these linkers/spacers as "linking agents" as recited in the methods of the present invention. Therefore, applicants respectfully submit that this rejection is improper and should be withdrawn.

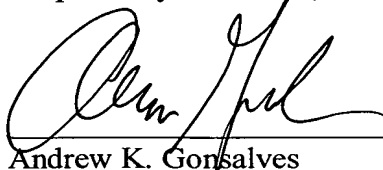
The rejection of claims 30-35 under 35 U.S.C. § 103(a) for obviousness over Adams in view of U.S. Patent No. 6,319,674 to Fulcrand et al. ("Fulcrand") is respectfully traversed in view of the above amendments to claim 1 and the following remarks. Fulcrand is cited as teaching methods for attaching ligands to a surface (e.g., glass, silica, magnesium sulfate, etc.), where the surface can be a solid substrate that has been functionalized with an amino group by reaction with an amine compound. Claims 30-35 indirectly depend from claim 1. Nowhere does Fulcrand teach or suggest the 5'-Amino Modifier C6 spacer recited in amended claim 1. Because Adams is deficient for the reasons noted above, and Fulcrand fails to overcome the deficiencies of Adams, the presently claimed invention would not have been obvious over Adams in view of Fulcrand. Therefore, the rejection of claims 30-35 should be withdrawn.

The rejection of claims 38-40 and 42 under 35 U.S.C. § 103(a) for obviousness over Adams in view of U.S. Patent No. 6,728,526 to George ("George") is respectfully traversed in view of the above amendments to claim 1 and the following remarks. George is cited as teaching the use of an extension mixture containing dATP, dCTP, dTTP, dGTP, dITP, and dUTP for use in extending nucleic acid strands. Claims 38-40 and 42 directly or indirectly depend from claim 1. Nowhere does George teach or suggest the 5'-Amino Modifier C6 spacer recited in amended claim 1. Because Adams is deficient for the reasons noted above, and George fails to overcome the deficiencies of Adams, the presently claimed invention would not have been obvious over Adams in view of George. Therefore, the rejection of claim 38-40 and 42 should be withdrawn.


In view of all of the foregoing, applicants submit that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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Andrew K. Gonsalves  
Registration No. 48,145

NIXON PEABODY LLP  
Clinton Square, P.O. Box 31051  
Rochester, New York 14603-1051  
Telephone: (585) 263-1658  
Facsimile: (585) 263-1600

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450, on the date below.	
August 24, 2005 Date	 Jo Ann Whalen